

## PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 57309-5034WO	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/US04/06333	International filing date (day/month/year) 03 March 2004 (03.03.2004)	Priority date (day/month/year) 03 March 2003 (03.03.2003)	
International Patent Classification (IPC) or national classification and IPC IPC(8): G02B 26/00 and US Cl.: 359/291			
Applicant MONTANA STATE UNIVERSITY-BOZEMAN			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 01 October 2004 (01.10.2004)		Date of completion of this report 22 January 2006 (22.01.2006)	
Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		Authorized officer Loha Ben <i>Lyla Ben</i> Telephone No. (571) 272-2323	

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/US04/06333

## Box No. I Basis of the report

1. With regard to the language, this report is based on:
  - the international application in the language in which it was filed.
  - a translation of the international application into English, which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4(a))
    - international preliminary examination (under Rules 55.2(a) and/or 55.3(a))
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
  - the international application as originally filed/furnished
  - the description:
 

pages 1-33 as originally filed/furnished  
 pages\* NONE received by this Authority on \_\_\_\_\_  
 pages\* NONE received by this Authority on \_\_\_\_\_
  - the claims:
 

pages 34-47 as originally filed/furnished  
 pages\* NONE as amended (together with any statement) under Article 19  
 pages\* NONE received by this Authority on \_\_\_\_\_  
 pages\* NONE received by this Authority on \_\_\_\_\_
  - the drawings:
 

pages 1/12-12/12 as originally filed/furnished  
 pages\* NONE received by this Authority on \_\_\_\_\_  
 pages\* NONE received by this Authority on \_\_\_\_\_
  - a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3.  The amendments have resulted in the cancellation of:
  - the description, pages NONE \_\_\_\_\_
  - the claims, Nos NONE \_\_\_\_\_
  - the drawings, sheets/figs NONE \_\_\_\_\_
  - the sequence listing (*specify*): NONE \_\_\_\_\_
  - any table(s) related to the sequence listing (*specify*): NONE \_\_\_\_\_
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - the description, pages \_\_\_\_\_
  - the claims, Nos \_\_\_\_\_
  - the drawings, sheets/figs \_\_\_\_\_
  - the sequence listing (*specify*): \_\_\_\_\_
  - any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

Form PCT/IPEA/409 (Box No. I) (April 2005)

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/US04/06333

## Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims <u>1-65</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>1-65</u>	YES
	Claims <u>NONE</u>	NO
Industrial Applicability (IA)	Claims <u>1-65</u>	YES
	Claims <u>NONE</u>	NO

## 2. Citations and Explanations (Rule 70.7)

Claims 1-65 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the principal limitations as to the movability of the inner portion with respect to the outer portion of the unitary member, and the respective locations of the at least one objective lens and the unitary member with respect to the light source, noted from the comparison analysis between the present independent claim 1 and Gelbart, best reference of record. The remaining claims contain limitations far more different from claim 1.

Claims 1-65 meet the criteria set out in PCT Article 33(4), and thus meet industrial applicability because the subject matter claimed can be made or used in industry.

----- NEW CITATIONS -----

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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**Box No. VII Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

In claim 16: line 3 from the bottom, "at least"(third occurrence) should be deleted.

In claim 34: line 5 appears to suggest that a portion of the claim is missing.

In claim 37: line 2, "lenses" should be -- lens --.

In claim 39: lines 2 and 4, "lenses" should be -- lens --.

In claim 43: bottom line, "the"(second occurrence) should be deleted.

In claim 61: line 2, before "along", -- point -- should be inserted.

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**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

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**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

In claims 10-12, 30 and 31: "the longitudinal axis" recited has no antecedent basis when claims 10-12, respectively, depend on claim 4.

In claim 13: claim 13 depends on claim 10, which itself depends on claim 4; and claim 4 does not have the objective lens. Therefore, "objective lens" recited in claim 13 has no antecedent basis.

In claim 14: line 2, "the reflective portion" has no antecedent basis.

In claim 16: line 7, "the point light source" has no antecedent basis.

In claims 23 and 25: line 2, "the longitudinal axis" has no antecedent basis when claims 23 and 25 are to depend on claim 1, 2, or 4.

In claim 28: line 1, "the at least one refractive optical element" has no antecedent basis.

In claim 31: the "objective lens" recited has no antecedent basis when claim 31 is to depend from claim 4.

In claim 41: lines 3 and 4, "the first end of the house" has no antecedent basis when claim 41 is to depend from claim 2.

In claim 42: line 1, "the housing" has no antecedent basis when claim 42 is to depend from claim 1 or 2.

In claim 46: line 4, "the inner member" has no antecedent basis.

In claim 57: the recitation contradicts that of line 5 of claim 56. To clarify the situation, the word --further-- should be inserted after "translating" recited on line 1 of claim 57.

In claims 63-65: the recitation is confusing due to dependency noted on line 1 of claim 63. When claim 63 depends from claim 57, the phrase "the first time interval" called for on line 2 of claim 65 has no antecedent basis. Now, when claim 63 depends from claim 60, the phrase "a second time interval" recited on line 2 of claim 65 should read -- the second time interval --, since "a second time interval" has already been recited in claim 60.

Claims 15, 17-22 and 24, depending from the above claims, inherit the indefiniteness thereof.

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